

## AUSTRALIAN CHALCID-WASPS.

BY A. A. GIRAULT.

Nowhere else in the world has this extensive group of beautiful insects received such attention as in Australia; and this attention has been given sufficiently early to insure a more complete knowledge of the entire group than is possible to be had in any of the older continents. For instance, in Europe and America, settlement and commerce, especially as regards America, have long since changed the nature and extent of the chalcidid population; while their classification has lagged and is chaotic. But in Australia the native population is as yet intact, and has received very little destruction, and very little foreign addition, while the exploration and classification of the group are well advanced.

These insects, though small, are remarkable for their metallic or variegated colouration, or for their grace, and are attractive also because of their great numbers and great diversity of habits. For though the majority are carnivorous as parasites, nevertheless many are phytophagous, and actually inhabit or cause various kinds of galls.

There is one group of peculiar forms known as Fig Insects; they inhabit the various native figs. Two entire groups confine their parasitism to the eggs of various orders of insects, and are noteworthy because of their minuteness, some being no larger than a mote of dust, and as elusive to the eye. Among these are some of the smallest of known insects, but in this country veritable giants occur among them, as with some of the other chalcid groups.

There is a group which resembles, in size and colour, various wasps, and these are the largest chalcids. There is another group which I find fascinating because of their stout vigorous bodies and great agility; these are the Encyrtids, rich in diversity. They seem to quiver with life and energy.

But the fascination which I find most constant and most alluring in reference to these insects, is that which has to do with their associations. The quest, and the green and blue, and glory of Nature. This is the pleasure of their study—the quest and the rich and varied memories associated with it—the eager hunt and the rich spoil and the grandeurs of this glorious earth on which we live.

For, after all, their classification, though of much interest and of great educational value (requiring great

effort and giving every emotional experience) is but a dry and arid desert as compared to their collection which releases a flood of generous emotion. The one is scientific, the other poetic.

#### NEW SPECIES.

I have had the pleasure recently of receiving from Mr. F. Erasmus Wilson, of East Malvern, Victoria, a collection of these insects reared from galls upon gum trees, and including new species which are characterised here. This is a valuable addition. The types are in Mr. Wilson's collection, cotypes in the Queensland Museum.

*ANAPHOIDEA NITENS*, sp. Nov. (Mymarinae). As *galtoni* Girault but tibiae 1-2 yellow, fore wings very wide, 34 lines of cilia, fringes one-third width; funicles elongate, 2 over 4 times longer than wide, 1 quadrate, 6 two and a half times longer than wide. A distinct fuscous stripe across wing from distal half marginal. Glistening. Male antennae 13 jointed, funicle 1 quadrate, rest elongate. Characterised by the wide wings. Reared from ova of Weevil *Gonipterus*, sp.

Victoria: Ferntree Gully, Nov., 1927, F. E. Wilson. Types and Cotypes.

*BOOTANOMYIA VICTORIAE*, sp. Nov. (Megastigminae). As *unistriata* but face yellow up to just above the antennae, dorsal abdomen black except for indefinite yellow spots down the side, and an obscure yellow area dorso-lateral, near apex; a line of punctures down each side of meson of scutum. Scutellum with 4 bristles, 3 and 4 a little closer together.

Victoria: Ferntree Gully, May 13, 1927, (J. E. Dixon, National Museum, Types). New South Wales: Albury, Oct., 1927, F. E. Wilson (1 Paratype female).

*CIRROSPILUS OCCIPITIS*, sp. Nov. (Eulophinae). Section II. of Species table. Scutum green except lateral margins narrowly, green truncate at apex. Propodeum, occiput, scutellum between the grooves, coxae and femora (slightly spotted), green. Abdomen long, pointed. Pronotum except lateral margins narrowly, and six bands across the abdomen, including apex, also metallic green; the apical and basal bands of abdomen each about one-sixth length.

New South Wales: Albury, Oct., 1927, F. E. Wilson. Types and Cotypes.

*METACRIAS VICTORIENSIS*, sp. Nov. (Entedoninae). As *aeneiscaphus*, but spicule of club present, short; lateral aspects and apex of fore tibiae, distal half of tibia 2, the same of tibia 3 (less by a fraction), white. Joint 1

smaller but scarcely shorter than 2. Male scape rectangularly dilated. With *Ditropinotella compressiventris*, Girault.

Victoria: Ferntree Gully, Oct., 1927, F. E. Wilson. Types and Cotypes.

BRACHYCHRYSOCHARELLA NUPTA, sp. Nov. (Entedoninae), Coxae, femora, (Femur 1 latero-ventral only, 3 yellow longitudinally centrally), tibia 2, 1 above, centrally, spots on 3 below knee and before apex, above green. Jaws bidentate. Basal two-thirds of scape yellow. Two ring, three funicle joints, latter increasing, 3 one-fourth of pedicel, twice wider than long. Wing 2 with 18 lines of cilea, obtuse at apex. Labial palpi 2 jointed.

Victoria: Melbourne, Oct., 1927, F. E. Wilson. Types and Cotypes.

EURYTOMA NOX, sp. Nov. (Eurytominae). As *sculptura* but median basin ovate, finely punctulate along median line, rest foveate, no channel. Segment 5 over thrice 4, exceeding 2-4 united. Tegulae, scape, tibia 1, 2 beneath, knees, tips of tibiae, femora 1-2 except ventrolateral at basal two-thirds, 3 mesad, red. Meson scutellum sparsely punctate. Post marginal barely exceeding the short stigmal, marginal twice longer. Funicle 1 quadrate, exceeding pedicel.

New South Wales: Albury, Oct., 1927, F. E. Wilson. Type and Cotype.

TETRASTICHUS WALSINGHAMI, sp. Nov. (Tetrastichinae). Honey colour, black as follows: Ocellar area, antennae except scape, face, prothorax, hind lateral angle of pronotum, parapside except laterad, axilla except extreme inner corner, a large cuneate mark towards centre of scutum each side of median line, propodeum out to spiracle, median line of scutellum widely, 6 stripes across abdomen, 6 distinctly before apex. Propodeum, abdomen long, a distinct median carina on former. Funicles quadrate, half length of pedicel. Ring joints large.

Victoria: Melbourne, Oct., 1927, F. E. Wilson. Types and Cotypes.

EUPELMUS MAWSONI, Girault, terrae, sub. sp. Nov. (Eupelminae). As typical form but legs aeneous, sides of flattened tibia 1, knees, tarsi, base and apex of middle tibia, apex of tibia 3 excepted. Ovipositor valves white, a little extruded. Mesopleurum bare.

Queensland: Toowong, H. James (Type in Queensland Museum). New South Wales: Albury, F. E. Wilson. (Paratype female).